CATALYTE

Reading

20 Questions

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Reading Section 1

Indoor Air Quality Concerns

All of us face a variety of risks to our health as we go about our day-to-day lives. Driving in cars, flying in planes, engaging in recreational activities, and being exposed to environmental pollutants all pose varying degrees of risk. Some risks are simply unavoidable. Some we choose to accept because to do otherwise would restrict our ability to lead our lives the way we want. And some are risks we might decide to avoid if we had the opportunity to make informed choices. Indoor air pollution is one risk that you can do something about.

In the last several years, a growing body of scientific evidence has indicated that the air within homes and other buildings can be more seriously polluted than the outdoor air in even the largest and most industrialized cities. Other research indicates that people spend approximately 90 percent of their time indoors. Thus, for many people, the risks to health may be greater due to exposure to air pollution indoors than outdoors.

CATALYTE 19:44

especially those suffering from respiratory or cardiovascular disease..

What Causes Indoor Air Problems?

Indoor pollution sources that release gases or particles into the air are the primary cause of indoor air quality problems in homes. Inadequate ventilation can increase indoor pollutant levels by not bringing in enough outdoor air to dilute emissions from indoor sources and by not carrying indoor air pollutants out of the home. High temperature and humidity levels can also increase concentrations of some pollutants.

There are many sources of indoor air pollution in any home. These include combustion sources such as oil, gas, kerosene, coal, wood, and tobacco products; building materials and furnishings as diverse as deteriorated, asbestos-containing insulation, wet or damp carpet, and cabinetry or furniture made of certain pressed wood products; products for household cleaning and maintenance, personal care, or hobbies; central heating and cooling systems and humidification devices; and outdoor sources such as radon, pesticides, and outdoor air pollution.

The relative importance of any single source depends on how much of a given pollutant it emits and how hazardous those emissions are. In some cases, factors such as how old the source is and whether it is properly maintained are significant. For example, an improperly adjusted gas stove can emit significantly more carbon monoxide than one that is properly adjusted.

Some sources, such as building materials, furnishings, and household products like air fresheners, release pollutants more or less continuously. Other sources, related to activities carried out in the home, release pollutants intermittently. These include smoking, the use of unvented or malfunctioning stoves, furnaces, or space heaters, the use of solvents in cleaning and hobby activities, the use of paint strippers in redecorating activities, and the use of cleaning products and pesticides in housekeeping. High pollutant concentrations can remain in the air for long periods after some of these activities.

If too little outdoor air enters a home, pollutants can accumulate to levels that can pose health and comfort problems. Unless they are built with special mechanical means of ventilation, homes that are designed and constructed to minimize the amount of outdoor air that can "leak" into and out of the home may have higher pollutant levels than other homes. However, because some weather conditions can drastically reduce the amount of outdoor air that enters a home, pollutants can build up even in homes that are normally considered "leaky."

How Does Outdoor Air Enter a House?

Outdoor air enters and leaves a house by: infiltration, natural ventilation, and mechanical ventilation. In a process known as infiltration, outdoor air flows into the house through openings, joints, and cracks in walls, floors, and ceilings, and around windows and doors. In natural ventilation, air moves through opened windows and doors. Air movement associated with infiltration and natural ventilation is caused by air temperature differences between indoors and outdoors and by wind. Finally, there are a number of mechanical ventilation devices, from outdoor-vented fans that intermittently remove air from a single room, such as bathrooms and kitchen, to air handling systems that use fans and duct work to continuously remove indoor air and distribute filtered and conditioned outdoor air to strategic points throughout the house. The rate at which outdoor air replaces indoor air is described as the air exchange rate. When there is little infiltration, natural ventilation, or mechanical ventilation, the air

Apartments can have the same indoor air problems as single-family homes because many of the pollution sources, such as the interior building materials, furnishings, and household products, are similar. Indoor air problems similar to those in offices are caused by such sources as contaminated ventilation systems, improperly placed outdoor air intakes, or maintenance activities..

Indoor Air and Your Health

Health effects from indoor air pollutants may be experienced soon after exposure or, possibly, years later..

The likelihood of immediate reactions to indoor air pollutants depends on several factors. Age and preexisting medical conditions are two important influences. In other cases, whether a person reacts to a pollutant depends on individual sensitivity, which varies tremendously from person to person. Some people can become sensitized to biological pollutants after repeated exposures, and it appears that some people can become sensitized to chemical pollutants as well.

Certain immediate effects are similar to those from colds or other viral diseases, so it is often difficult to determine if the symptoms are a result of exposure to indoor air pollution. For this reason, it is important to pay attention to the time and place the symptoms occur. If the symptoms fade or go away when a person is away from the home and return when the person returns, an effort should be made to identify indoor air sources that may be possible causes. Some effects may be made worse by an inadequate supply of outdoor air or from the heating, cooling, or humidity conditions prevalent in the home..

Identifying Air Quality Problems

Some health effects can be useful indicators of an indoor air quality problem, especially if they appear after a person moves to a new residence, remodels or refurnishes a home, or treats a home with pesticides. If you think that you have symptoms that may be related to your home environment, discuss them with your doctor or your local health department to see if they could be caused by indoor air pollution. You may also want to consult a board-certified allergist or an occupational medicine specialist for answers to your questions..

-United States Environmental Protection Agency
excerpted from "The Inside Story - A Guide to Indoor Air Quality"
April 1995

Pollutants	By- Product of combustion such as carbon monoxide, carbon dioxide and nitrogen oxides.
Sources	Unvented kerosene and gas heaters, gas appliances, wood- and gas-burning fireplaces, leaking chimneys and furnaces, tobacco smoke, automobile exhaust in attached garages.
	Eye, nose and throat irritation, impaired lung

Control	1. Avoid use of unvented gas or kerosene space heaters 2. Keep gas appliances and furnaces properly adjusted 3. Install and use exhaust fans. 4. Change filters on heating/cooling systems and air cleaners 5. Increase of supply of outside air 6. Proper location of air intakes to avoid exhaust from vehicles
Pollutants	**Environmental tobacco smoke**
Sources	Cigarettes, cigars, pipes
Health Effects	Eye, nose and throat irritation, headaches, pneumonia. Increased risk of respiratory and ear infections in children. Lung cancer and increased risk of heart disease.
Control	1. Stop smoking 2. Discourage others from smoking 3. Isolate smokers outdoors
Pollutants	**Formaldehyde**
Sources	Pressed wood products(hardwood, plywood wall paneling, particleboard, fiberboard)used in buildings and furniture, urea-formaldehyde foam insulation, permanent press textiles, glue, ETS[environmental tobacco smoke], vehicle exhaust, stoves, fireplaces.
Health Effects	Eye, nose and throat irritation, coughing, fatigue, rashes and allergic reactions. Causes cancer in animals. Death at very high concentration.
Control	1. Use products with lower emission rates of formaldehyde 2. Keep humidity low in house 3.Aging or baking of products.

Sources	Paints, solvents, wood preservatives, aerosol sprays, cleaners and disinfectants, moth repellents, air fresheners, hobby supplies and dry cleaned clothes
Health Effects	Eye, nose and throat irritation, headaches, loss of coordination, nausea, damageto kidney and central nervous system. Some may cause cancer in humans.
Control	1. Buy only what you need 2. Read labels and follow instruction. 3. Use in well-ventilated areas or outdoors 4. Hang dry cleaned clothes in an open area for about 6 hours.

Pollutants	Radon
Sources	Local geology, soil, water
Health Effects	Lung cancer, possibility of stomach cancer
Control	1. Seal cracks and opening in the basement 2. Ventilate crawl space 3. Subslab suction 4. Increase ventilation

Pollutants	Pesticides
Sources	Garden and lawn chemicals, poisons for pest control
Health Effects	Eye,nose, and throat irritation, damage to central nervous system and kidney, cancer
Control	1.Use nonchemical if possible 2. Remove asbestos by a trained contractor or develop a maintenance plan 3. Encapsulation of material containing asbestos

Sources	Deteriorating or damaged insulation or acoustical material
Health Effects	Cancer and lung diseases (smokers at higher risk)
Control	1. Test the suspected material 2. Remove asbestos by a trained contractor or develop a maintenance plan 3. Encapsulation of material containing asbestos

Pollutants	Heavy metals
Sources	Paints, automobiles, tobacco smoke, soil, and dust
Health Effects	Headaches, irritation in mouth, rash, excessive perspiration, kidney damage.
Control	1.Vacuum regularly 2. Removal of lead based paint

Pollutants	Bioaerosols
Sources	Humans, pets, moist surfaces, humidifiers, ventilation systems, drip pans, cooling coils in air handling units, plants, outside air
Health Effects	Legionnaires' disease, humidifier fever, influenza
Control	1. Remove the source 2. Maintenance of equipment 3. Humidity control to 40% to 60% 4. Use of filters in ventilation 5. Air cleaning by the use of disinfectants

Section 1 Questions

According to lines 1 through 7, health risks posed to individuals by indoor air pollutants can be

- identified
- lessened
- concealed
- explained

According to the text, outdoor air in large cities can be less polluted than air

- around stagnant water
- near large farms
- within some buildings
- above congested highways

Which group of people would be most likely to suffer harm from indoor pollutants?

- shoppers in retail stores
- secretaries in professional offices
- clerks in grocery stores
- residents of nursing homes

The amount of pollutant released by a household item is sometimes affected by the item's

- size
- weight
- age
- cost

According to the text, architects and builders may produce homes with high pollutant levels when they attempt to

- control spending
- increase weatherproofing
- speed up construction

According to the chart, one way to lessen the number of pollutants released by combustion is to

- buy gas appliances
- install pressed wood paneling
- replace heating system filters
- use space heaters

According to the chart, when clothes are first brought home from the dry cleaner, they preferably should be placed in

- a large trunk
- an open porch
- an attic storeroom
- a clothes closet

Use of gardening chemicals can cause damage to the human

- muscular system
- skeletal system
- nervous system
- circulatory system

Bioaerosols would most probably be found in areas that are

- unheated
- damp
- cluttered
- dim

One of the most common health effects of indoor air pollutants is

- throat irritation
- reoccurring nausea
- Legionnaires' disease
- severe headaches

Reading Section 2

Two days before my first novel was to be published, while I was packing to leave the small Vermont town in which I live to go to New York, the telephone rang, and when I snatched it up irritably and said, "Hello," a sweet old lady's voice answered me, "Hello, who's this?" which is a common enough Vermont telephone greeting.

"This is Shirley Jackson," I said, a little soothed because my name reminded me of my book.

"Well," she said vaguely, "is Mrs. Stanley Hyman there, please?"

I waited for a minute and then, "This is Mrs. Hyman," I said reluctantly.

Her voice brightened. "Mrs. Hyman," she said, pleased, "This is Mrs. Sheila Lang of the newspaper. I've been trying to get in touch with you for days."

"I'm so sorry," I said. "I've been terribly busy-my book, and all."

"Yes," she said. "Well, Mrs. Hyman, this is what I wanted. You read the paper, of course?"

"Of course," I said, "and I've been sort of expecting-"

"Well, then, surely, you read the North Village Notes column?"

"Yes, indeed," I said warmly.

"That's my column," she said. "I write that column."

"Of course, I'm a North Village resident," I said, "but I rather thought that for a thing of this importance-"

"Now, what I'm doing is this. I'm calling up a few people in town who I thought might have items of news for me-"

"Certainly," I said, and reached for one of the numerous copies of the book jacket lying around the house. "The name of the book-"

"First of all," she said, "where exactly in town do you live, Mrs. Hyman?"

"On Prospect Street," I said. "The Road Through the Wall."

"I see," she said. "Just let me take that down."

"That's the name of the book," I said.

"Yes," she said. "Which house would that be, I wonder?"

"The old Elwell place," I said.

"On the corner of Mechanic? I thought the young Elwells lived there."

"That's the one," I said. "It's going to be published the day after tomorrow."

"I didn't know anyone lived there," she said. "I thought it was empty."

"We've lived here three years," I said, a little stiffly.

"I don't get out much anymore," she said. "Now, what little items of local news do you have for me? Any visitors? Children's parties?"

"I'm publishing a book next week," I said. "I am going down to New York for my publication day."

"Taking your family?" she asked. "Any children, by the way?"

"Two," I said. "I'm taking them."

"Isn't that nice," she said. "I bet they're excited."

"You know," I said madly, "I've been asked to do the Girl Scout column for your paper."

"Really?" She sounded doubtful. "I'm sure You'll enjoy it. It's such an informal newspaper."

"Yes," I said. "Would you like to hear about my book?"

"I certainly would," she said. "Anytime you have any little newsy items for me, you be sure and call me right up. My number's in the book."

"Thank you," I said. "Well, my book -"

"I have so much enjoyed our little talk, Mrs. Hyman. Imagine me not knowing anyone was living in the old Thatcher place!"

"The Road Through the Wall," I said. "Farrar and Straus."

"You know," she said, "now that I don't get out any more, I find that doing this column keeps me in touch with my neighbors. It's social, sort of."

"Two-seventy-five," I said. "It'll be in the local bookstore."

"You'll probably find the same thing with the Girl Scout column," she said. "Thank you so much, Mrs. Hyman. Do call me again soon."

"I started it last winter," I said.

"Goodbye," she said sweetly, and hung up.

I kept the column that appeared as the North Village Notes of the newspaper the next day. Several people remarked on it to me. It was on the last page of the four!

NORTH VILLAGE NOTE

One of the hooked rug classes met last evening with Mrs. Ruth Harris.

Hurlbut Lang of Troy spent the weekend with his parents in North Village, Mr. and Mrs. R. L. Lang.

The food sale of the Baptist Church has been postponed indefinitely due to weather conditions.

Mrs. Stanley Hyman has moved into the old Thatcher place on Prospect Street. She and her family are visiting Mr. and Mrs. Farrarstraus of New York City this week.

Mrs. J. N. Arnold of Burlington spent the weekend in town with Mr. and Mrs. Samuel Montague.

Little Lola Kittredge of East Road celebrated her fifth birthday on Tuesday. Six little friends joined to wish her many happy returns of the day, and ice cream and cake were served.

-Shirley Jackson

"Fame"

from Writer, August 1948

Section 2 Questions

According to the passage, the narrator calls herself "Shirley Jackson" on the phone to emphasize pride in her

- children
- career
- wealth
- marriage

The caller, Mrs. Lang, is seeking information for a

- community database
- brief biography
- neighborhood census
- newspaper column

The passage's main conflict is based on the characters'

- different motives
- varied education

As used in the passage, The Road Through the Wall refers to a

- play
- novel
- movie
- newspaper

Mrs. Lang's reference to the builder and original owner of the house (lines 33 and 34) emphasizes her

- appreciation of local art
- respect for historic architecture
- interest in modern literature
- knowledge of town history

The passage is primarily developed through the use of

- example
- description
- argument
- dialogue

Reading Section 3

Soybeans

The October air was warm and musky, blowing

Over brown fields, heavy with the fragrance

Of freshly combined beans, the breath of harvest.

He was pulling a truckload onto the scales

Wearing a three-piece suit and a gold pinky ring.

The man said he had just invested a hundred grand

In soybeans and wanted to see what they looked like.

The farmer stared at the man and was quiet, reaching

For the tobacco in the rear pocket of his jeans,

Where he wore his only ring, a threadbare circle rubbed

By working cans of dip and long hours on the backside

Of a hundred acre run. He scooped up a handful

Of small white beans, the pearls of the prairie, saying:

Soybeans look like a foot of water on the field in April

When you're ready to plant and can't get in;

Like three kids at the kitchen table

Eating macaroni and cheese five nights in a row;

Or like a broken part on the combine when

Your credit with the implement dealer is nearly tapped.

Soybeans look like prayers bouncing off the ceiling

When prices on the Chicago grain market start to drop;

Or like your old man's tears when you tell him

How much the land might bring for subdivisions.

Soybeans look like the first good night of sleep in weeks

When you unload at the elevator and the kids get Christmas.

He spat a little juice on the tire of the Cadillac,

Laughing despite himself and saying to the man:

Now maybe you can tell me what a hundred grand looks like.

-Thomas Alan Orr

from Hammers in the Fog, 1995

Section 3 Questions

The purpose of lines 1 through 3 is to

- explore character
- establish setting
- introduce conflict
- create rhyme

The description of "a man" (lines 6 through 9) emphasizes the man's

- prosperity
- humility
- intolerance
- jealousy

In lines 10 through 15, the contrast between the farmer and the man is best established by which phrase?

- "small white beans" (line 15)
- "a hundred acre run" (line 14)
- "*his* only ring" (line 12)
- "reaching for the tobacco" (lines 10 and 11)

Lines 16 through 27 make the reader aware of the

- size of the family
- growth of the soybeans
- struggles of the farmer
- effects of the drought

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Save

Save & Exit